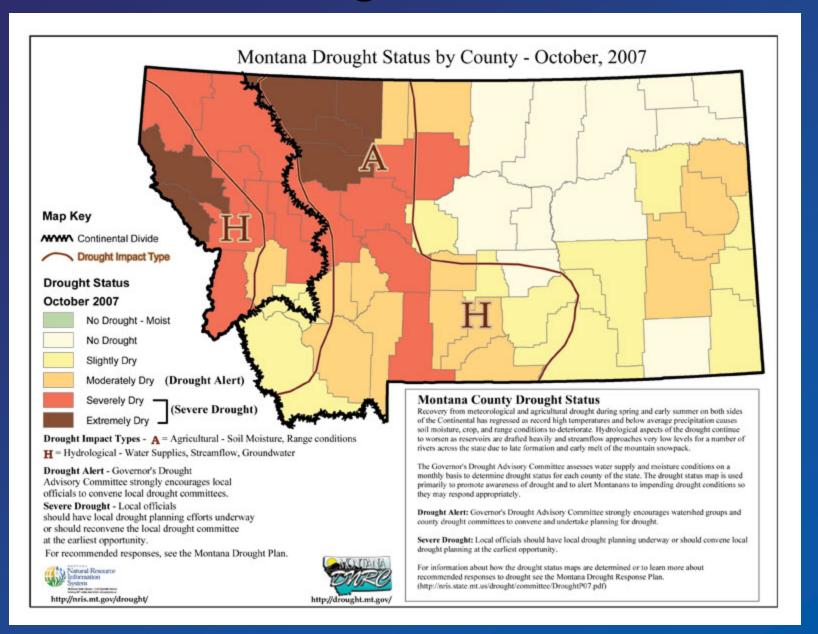
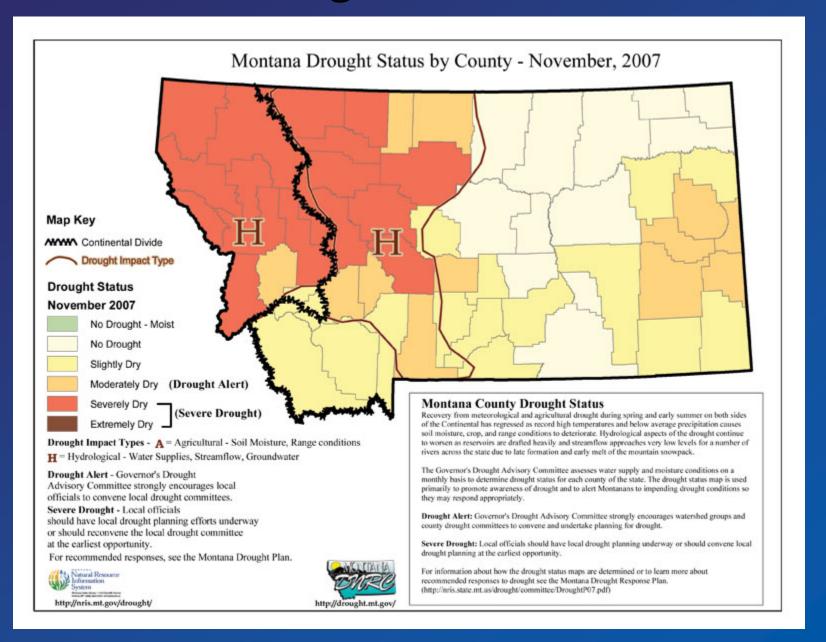
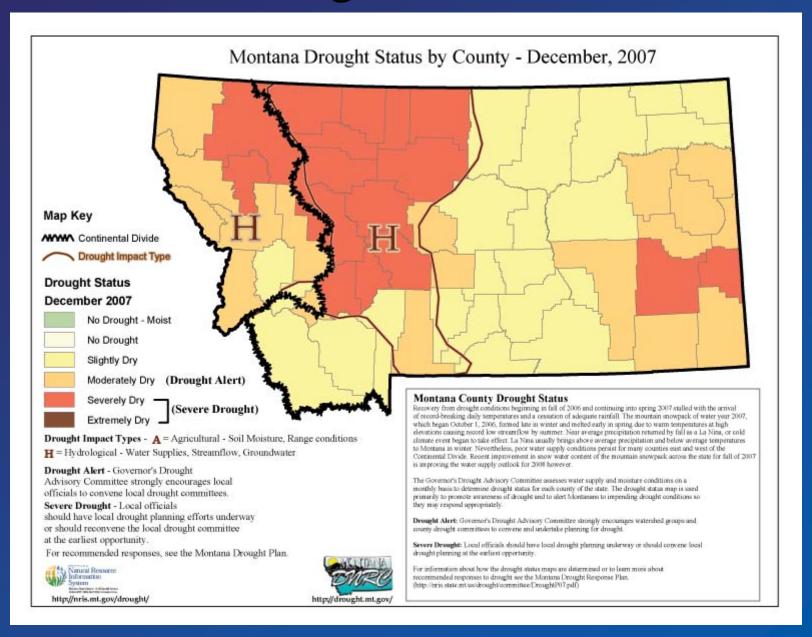
Montana Drought Status - October



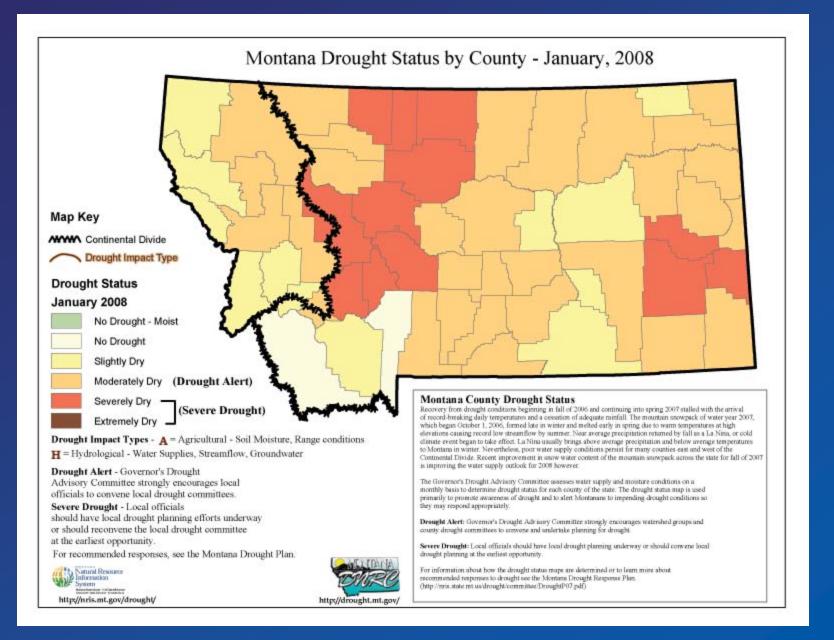
Montana Drought Status - November



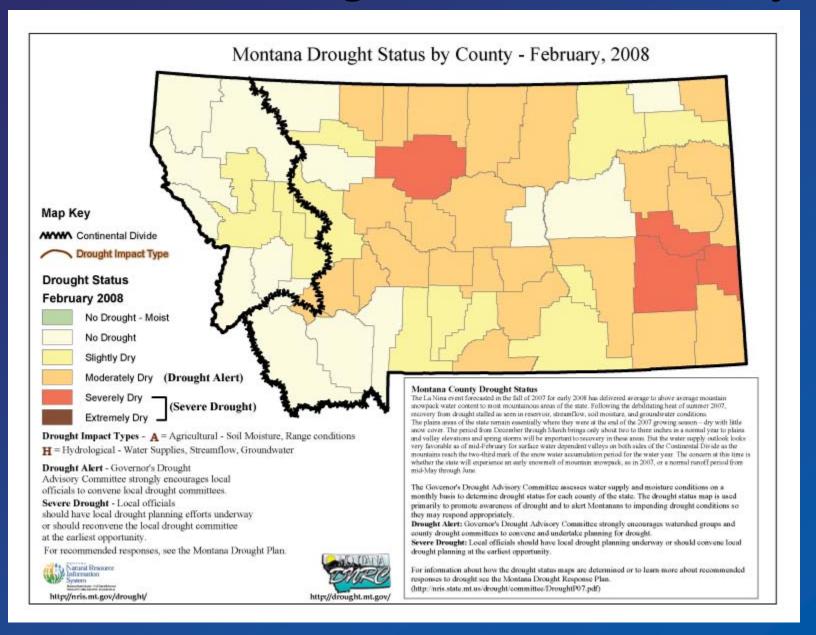
Montana Drought Status - December



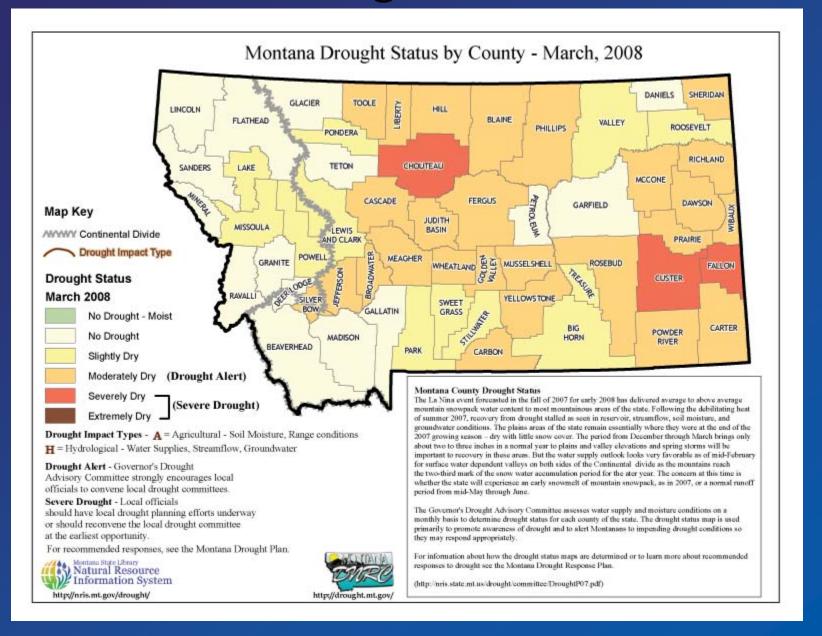
Montana Drought Status - January



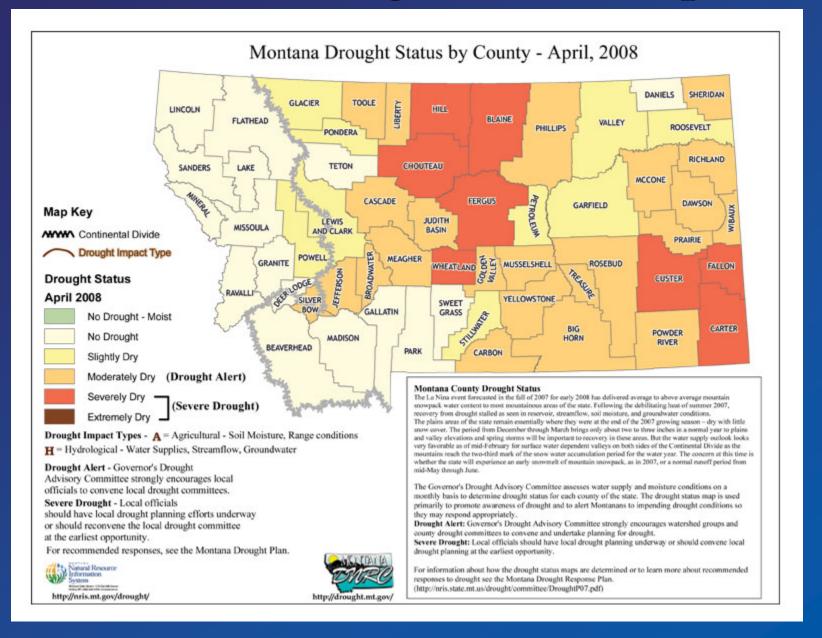
Montana Drought Status - February



Montana Drought Status - March



Montana Drought Status - April





Governor's Drought Advisory Committee Meeting

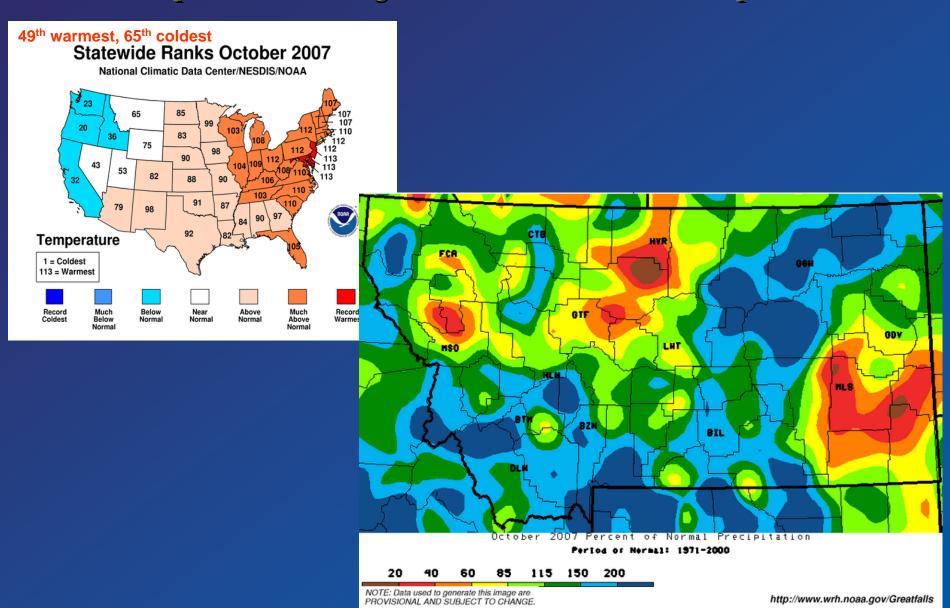
April 17, 2008

National Weather Service

Gina Loss

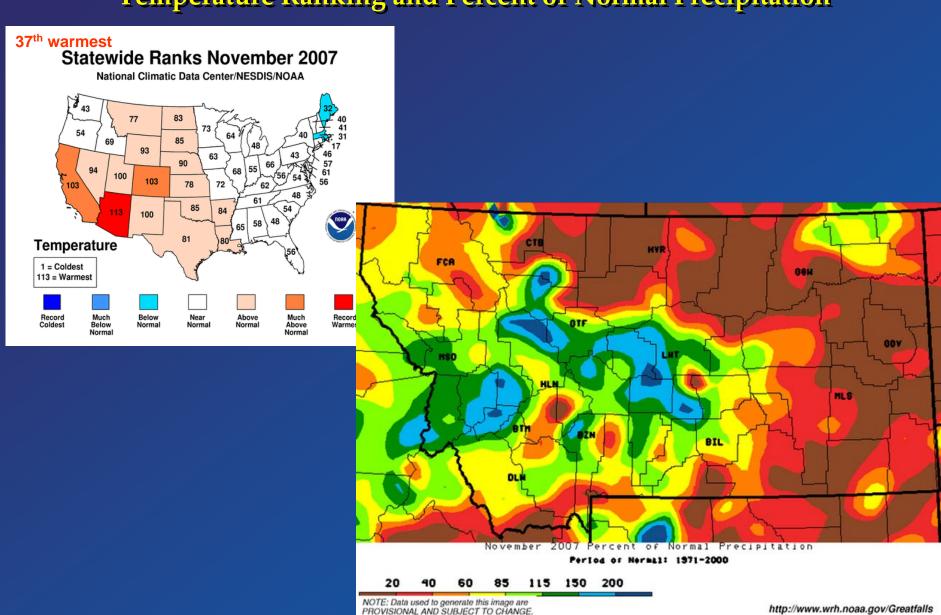
October 2007

Temperature Ranking and Percent of Normal Precipitation



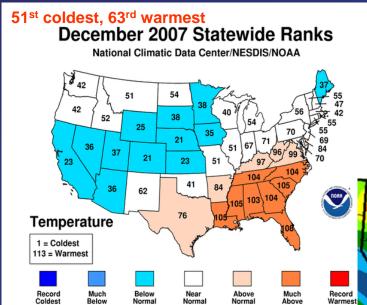
November 2007

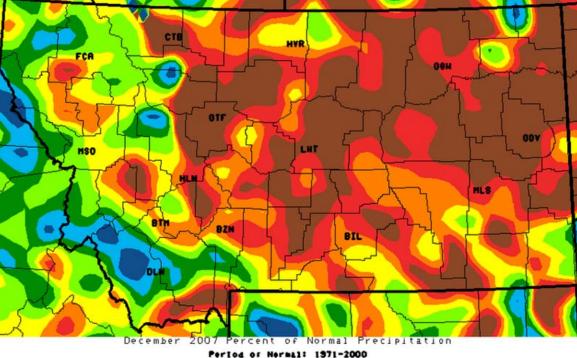
Temperature Ranking and Percent of Normal Precipitation



December 2007

Temperature Ranking and Percent of Normal Precipitation





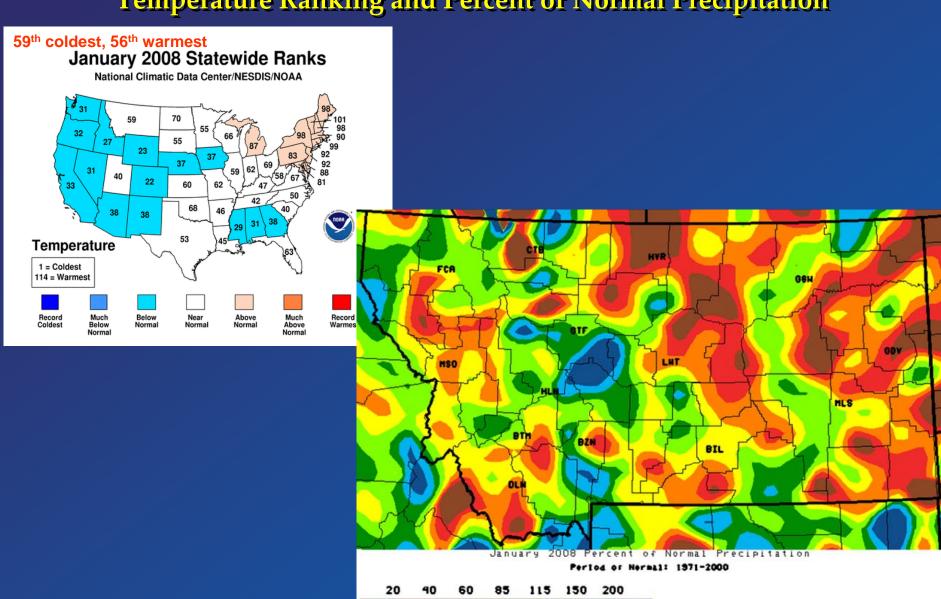
20 40 60 85 115 150 200

NOTE: Data used to generate this image are

PROVISIONAL AND SUBJECT TO CHANGE.

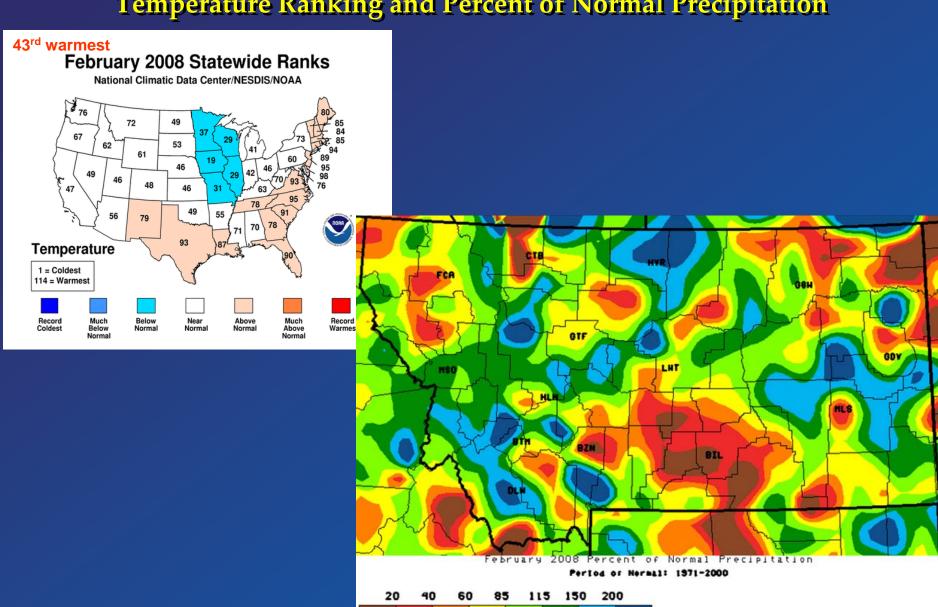
January 2008

Temperature Ranking and Percent of Normal Precipitation



February 2008

Temperature Ranking and Percent of Normal Precipitation

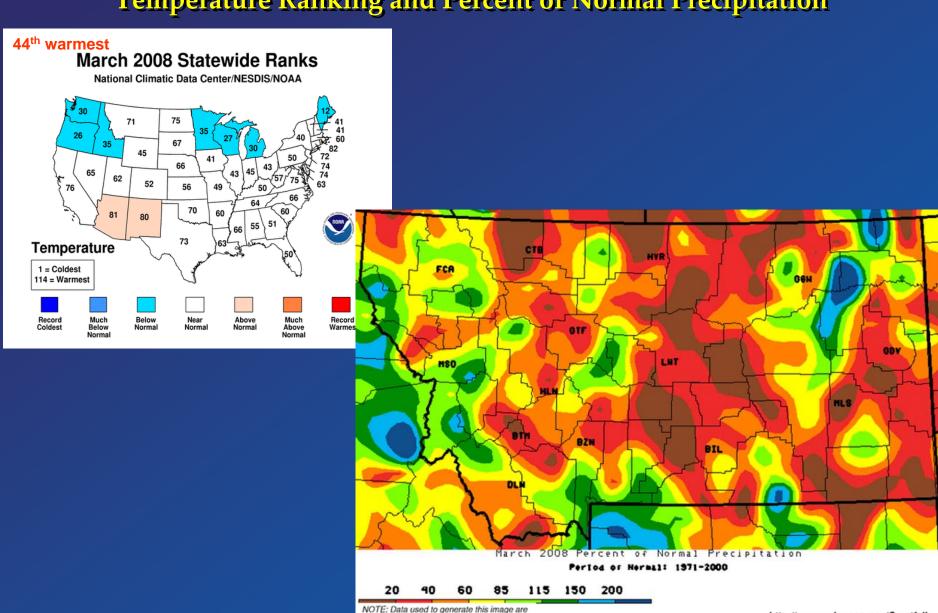


NOTE: Data used to generate this image are PROVISIONAL AND SUBJECT TO CHANGE.

http://www.wrh.noaa.gov/Greatfalls

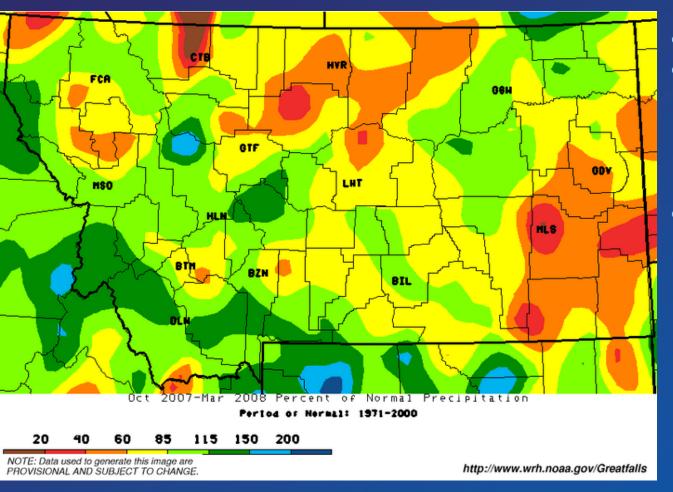
March 2008

Temperature Ranking and Percent of Normal Precipitation



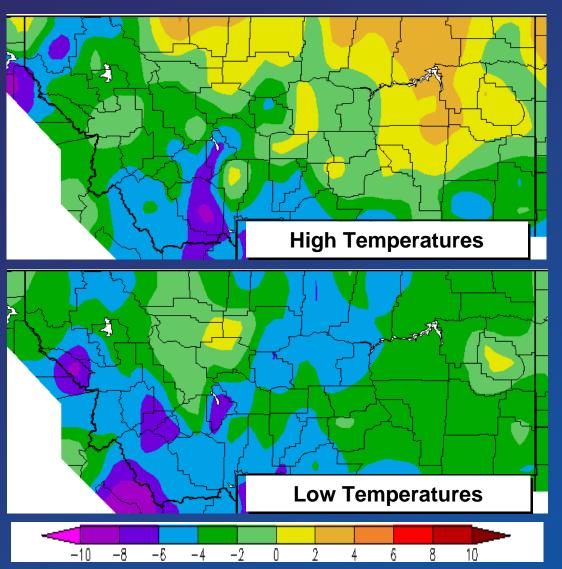
PROVISIONAL AND SUBJECT TO CHANGE.

Percent of Normal Precipitation Water Year 2008



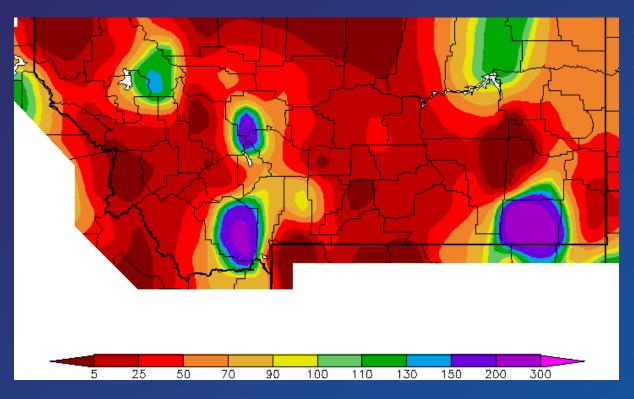
- October March
- Western Montana averaging near normal
 - Small areas above normal southwest
- Central and eastern
 Montana averaging
 below normal
 - Areas well below normal north central and southeast

Temperature Anomalies April 1 - 14



- Temperatures averaging below normal
- Highs
 - 2 to 8 degrees below normal west and south
 - Near to 4 degrees above normal north central and northeast
- Lows
 - 2 to 8 degrees below normal

Percent of Average Precipitation April 1 - 14



- Dry!
- Virtually all of Montana well below normal
 - Large areas in west and central have received less than 25% of normal precipitation for the month so far

Precipitation Totals

April and Water Year 2008

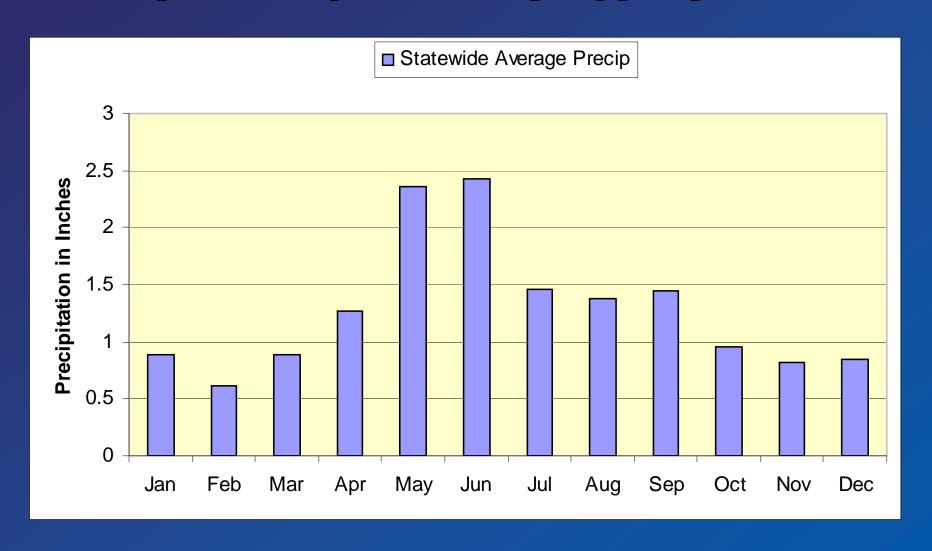
		APRIL 1 - 15				WATER YEAR TO DATE			
	ACTUAL	NRML	+/-	% OF	ACTUAL	NRML	+/-	% OF	
WESTERN MONTANA	PCPN	PCPN	NRML	NRML	PCPN	PCPN	NRML	NRML	
BUTTE	0.11	0.45	-0.34	24	2.73	4.20	-1.47	65	
KALISPELL	0.19	0.56	-0.37	34	5.27	8.35	-3.08	63	
MISSOULA	0.04	0.30	-0.26	13	4.40	4.93	-0.53	89	
MULLAN PASS	0.78	1.48	-0.70	53	30.99	33.78	-2.79	92	
SOUTHWEST MONTANA									
BIG SKY	0.89	0.45	0.44	198	12.51	9.26	3.25	135	
BOULDER	0.05	0.30	-0.25	17	2.67	3.12	-0.45	86	
BELGRADE FIELD	1.22	0.60	0.62	203	5.44	5.25	0.19	104	
BOZEMAN MSU	0.27	0.92	-0.65	29	8.63	7.36	1.27	117	
DILLON AIRPORT	0.20	0.39	-0.19	51	3.23	2.61	0.62	124	
ENNIS	1.17	0.58	0.59	202	6.43	4.47	1.96	144	
HELENA	0.16	0.38	-0.22	42	2.68	3.49	-0.81	77	
ROGERS PASS 9 NNE	0.10	0.63	-0.53	16	3.43	5.81	-2.38	59	
TOWNSEND	0.22	0.30	-0.08	73	2.35	2.82	-0.47	83	
WISDOM	0.16	0.43	-0.27	37	5.24	4.48	0.76	117	

Precipitation Totals

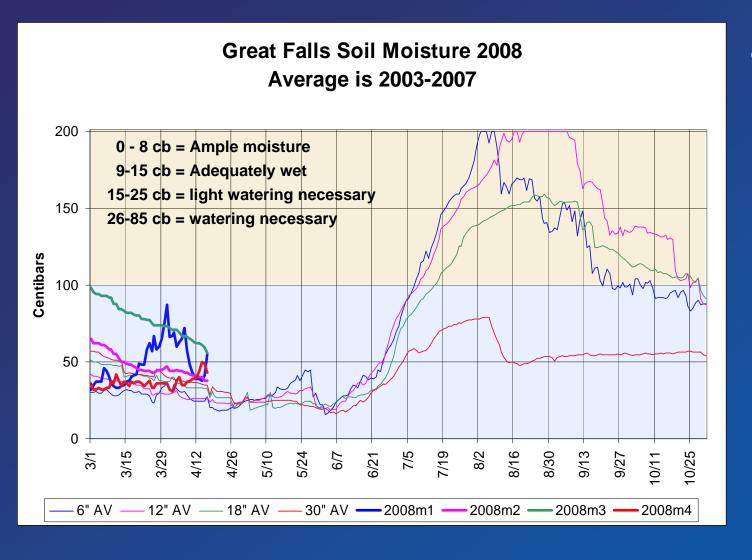
April and Water Year 2008

	APRIL 1 - 15				7477	WATER YEAR TO DATE			
	ACTUAL	NRML	+/-	% OF	ACTUAL	NRML	+/-	% OF	
	PCPN	PCPN	NRML	% OF NRML	PCPN	PCPN	H/- NRML	% OF NRML	
CENTRAL MONTANA	PCPN	PCPN	NKML	NICOLL	PCPN	PCPN	NRML	NRMIL	
CENTRAL MONTANA									
BILLINGS	0.04	0.79	-0.75	5	3.95	5.91	-1.96	67	
CASCADE 20 SSE	0.14	0.46	-0.32	30	4.72	3.97	0.75	119	
CHESTER	0.00	0.30	-0.30	0	1.47	2.70	-1.23	54	
CHOTEAU	2.07	0.25	1.82	828	6.63	2.31	4.32	287	
CONRAD	0.08	0.43	-0.35	19	1.23	3.37	-2.14	36	
CUT BANK	0.01	0.34	-0.33	3	1.05	2.78	-1.73	38	
FORT ASSINNIBOINE	0.00	0.39	-0.39	0	1.65	3.62	-1.97	46	
GOLD BUTTE 7 N	0.16	0.45	-0.29	36	2.39	3.57	-1.18	67	
GRASS RANGE	0.34	0.60	-0.26	57	4.21	4.86	-0.65	87	
GREAT FALLS	0.40	0.60	-0.20	67	3.54	5.01	-1.47	71	
HARLEM	0.01	0.26	-0.25	4	1.40	2.72	-1.32	51	
HAVRE	0.01	0.35	-0.34	3	1.50	3.46	-1.96	43	
LIVINGSTON	1.06	0.65	0.41	163	4.94	5.12	-0.18	96	
LEWISTOWN	0.34	0.60	-0.26	57	3.43	5.85	-2.42	59	
MARTINSDALE 3 NNW	0.23	0.50	-0.27	46	3.62	3.81	-0.19	95	
NEIHART 8 NNW	0.43	0.78	-0.35	55	7.09	7.15	-0.06	99	
SHELBY	0.00	0.21	-0.21	0	1.35	1.84	-0.49	73	
STANFORD	0.25	0.65	-0.40	38	3.34	5.09	-1.75	66	
VALIER	0.10	0.35	-0.25	29	2.11	2.74	-0.63	77	
WHITE SULPHUR SPRGS	3 0.30	0.49	-0.19	61	3.65	4.08	-0.43	89	
EASTERN MONTANA									
GLASGOW	0.33	0.30	0.03	110	3.14	2.87	0.27	109	
MILES CITY	0.02	0.58	-0.56	3	0.64	4.08	-3.44	16	

Statewide Average Precipitation April showing increase to spring precipitation

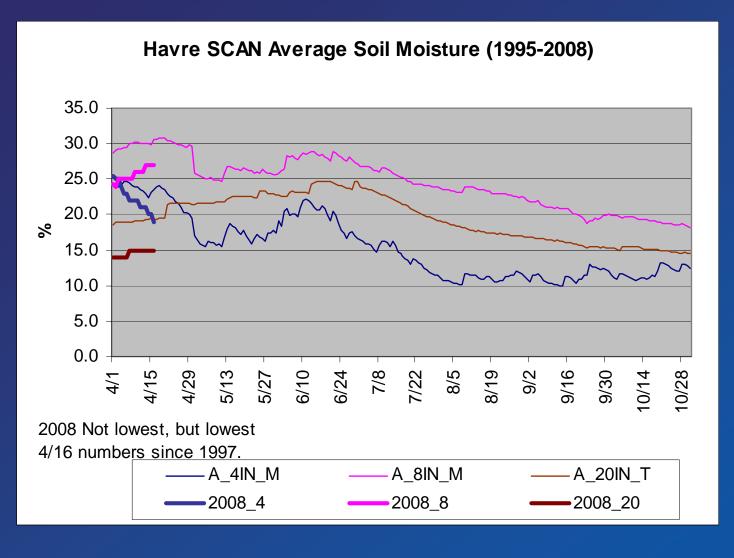


Great Falls Soil Moisture



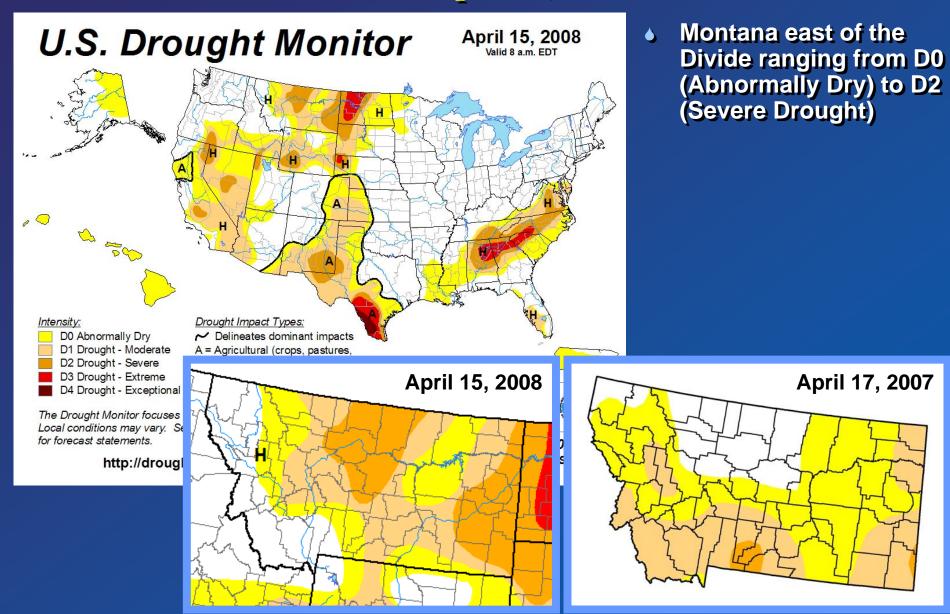
Drier than "average" at all levels

Havre Soil Moisture

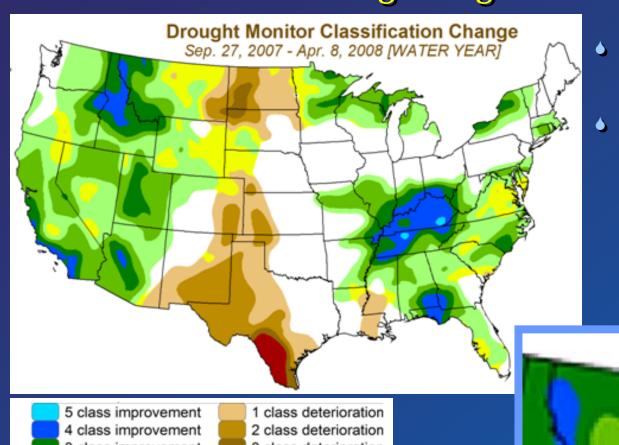


- Driest since 1997
- Not driest of record

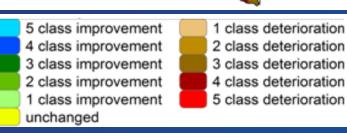
National Drought Monitor Issued April 15, 2008

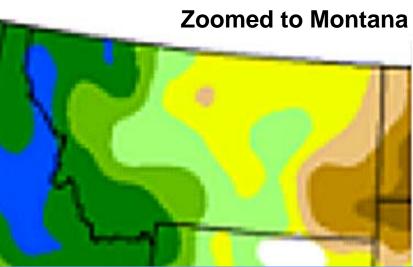


Change in Drought Classification From Beginning of Water Year

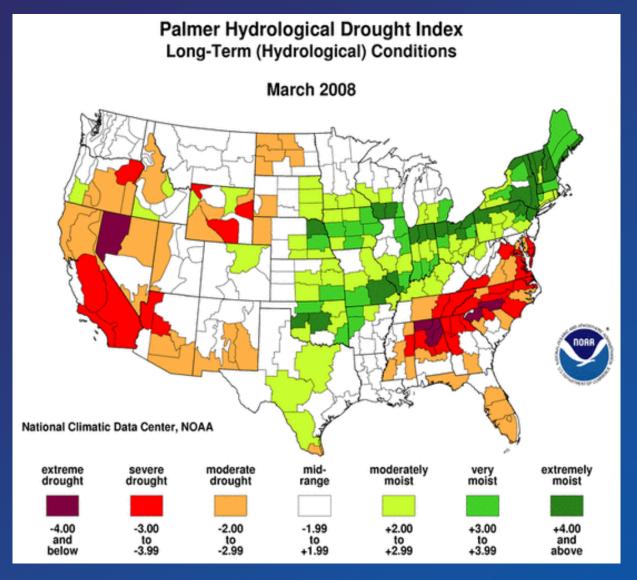


- Western Montana has improved 2 to 4 categories
- East has degraded 1 to 2 categories



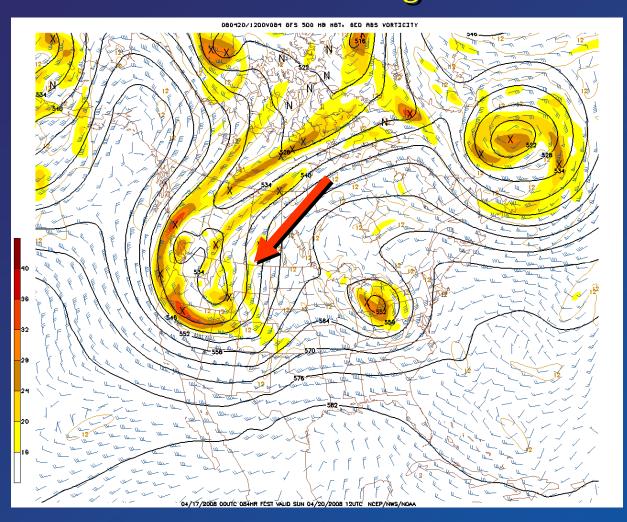


Palmer Hydrological Drought Index March 2008



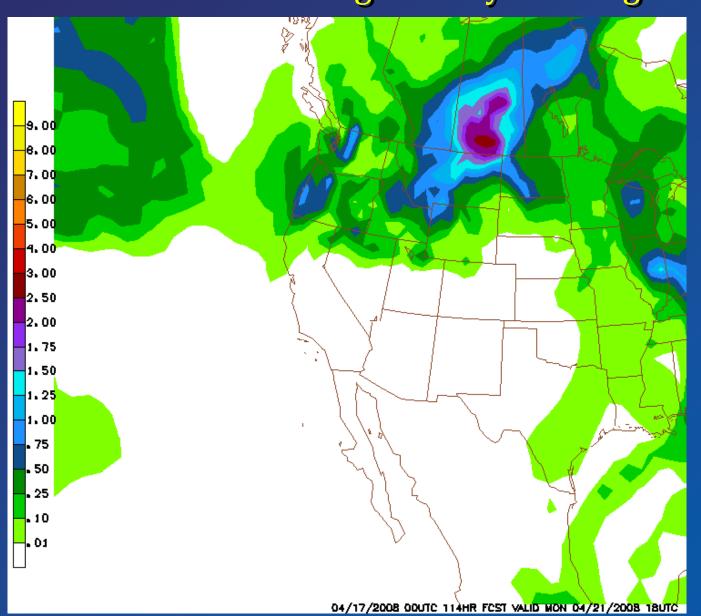
No Montana climate divisions classified as either 'moist' or 'drought'

Sunday Morning Outlook 500mb Heights and Anomalies

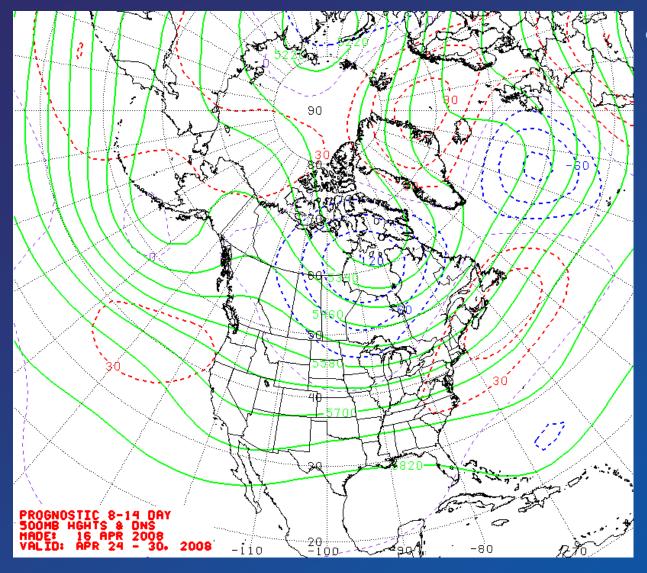


 Deep, cold low pressure trough moving across northwest U.S. and Montana

Precipitation Outlook60-Hour Total Ending Monday Morning

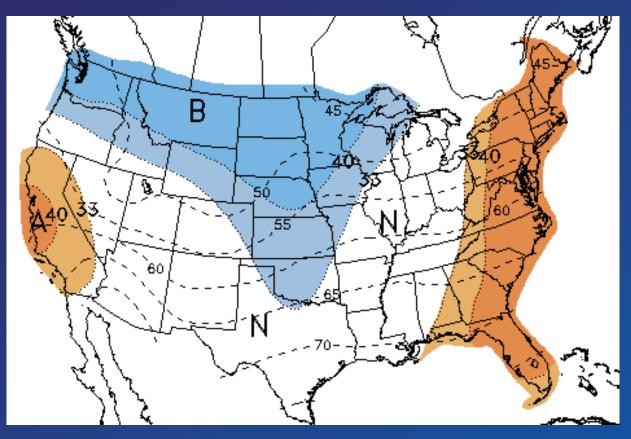


8 to 14 Day Outlook 500mb Heights and Anomalies



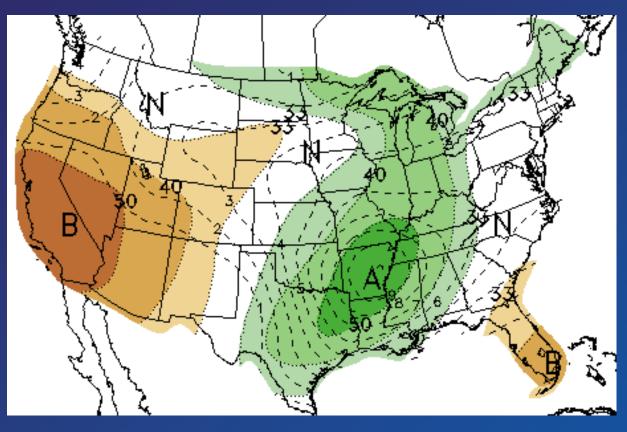
 Westerly flow aloft across Pacific Northwest and into Montana

8 to 14 Day Outlook – Temperatures



- April 24 30
- 40% to 50% chance temperatures will be below normal over Montana
- Averages
 - Highs 50s
 - Lows 30s to lower 40s

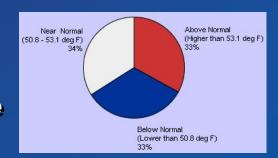
8 to 14 Day Outlook - Precipitation

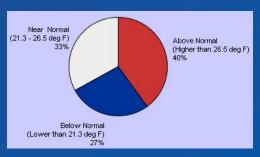


- April 24 30
- Equal chances for above... below or near normal precipitation across most of Montana
 - 33% to 40%
 chance of above normal precipitation extreme northeast
- Normals
 - 0.75 to 1.75 inches

Interpreting the Probability Maps

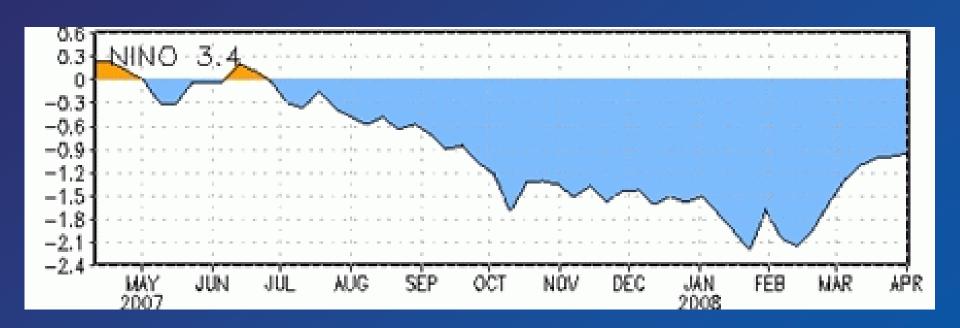
- Colored shading indicates degree of confidence forecaster has in the category indicated
 - "B" and blue colors indicate "below-normal"
 - "A" and orange-red colors indicate "above normal"
 - The darker the shading, the greater is the level of confidence.
- The probabilities of all three categories are implied on the map and sum to 100%.
 - Forecast probabilities generally fall far short of complete confidence (100%) in any single category.
 - Probability of the "A" or "B" category is greater than 33.33%
 - The probability of the opposite category declines by that amount
 - The probability of the middle category remains at 33.33%.
 - When the "N" category is greater than 33.33%
 - Probabilities of both the "A" and "B" categories are reduced by 1/2 the amount that the "N" category exceeds 33.33%.
 - When the probability of "A", or "B" reaches 63.33% or higher
 - Odds of the opposite category reach a minimum allowed value of 3.33%
 - Odds of the middle category are allowed to drop below 33.33%.





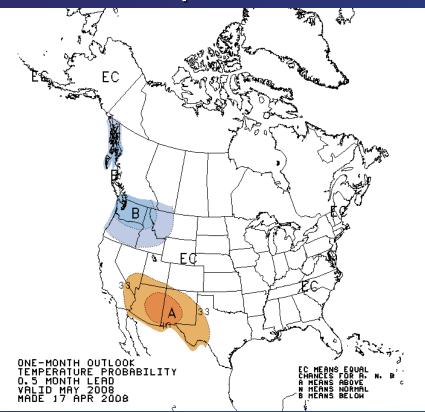
El Niño / La Niña

 La Niña conditions (below normal sea surface temperatures) expected to continue for next 3 months



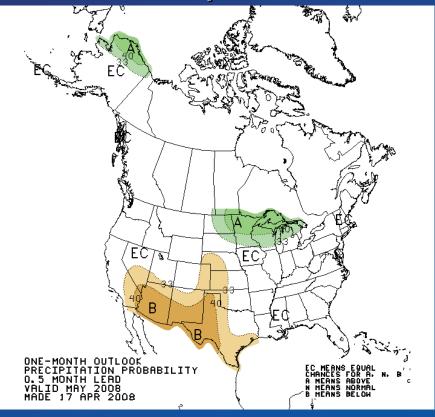
May Outlook

Temperature



- Better chances temperatures will be below normal over western half of Montana
 - 33% to 50% chance
- Remainder of area shows no forecast skill...
 - Equal chances temperatures will be above... below or near normal

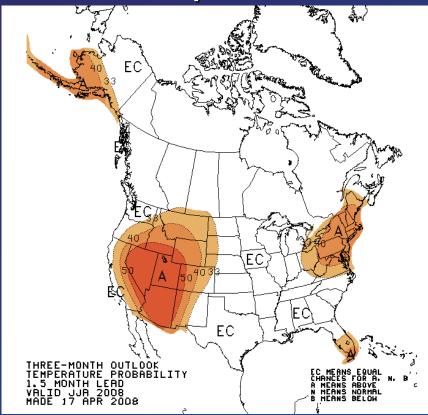
Precipitation



- No forecast skill during this period
 - Equal chances precipitation will be above... below or near normal

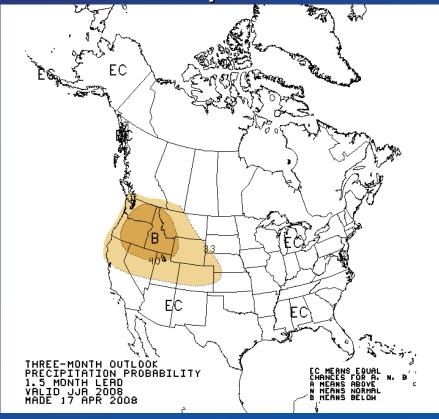
June - August Outlook

Temperature



- Better chances temperatures will be above normal over most of Montana
 - 33% to 40% chance north and east
 - 40% to 50% chance southwest and south central

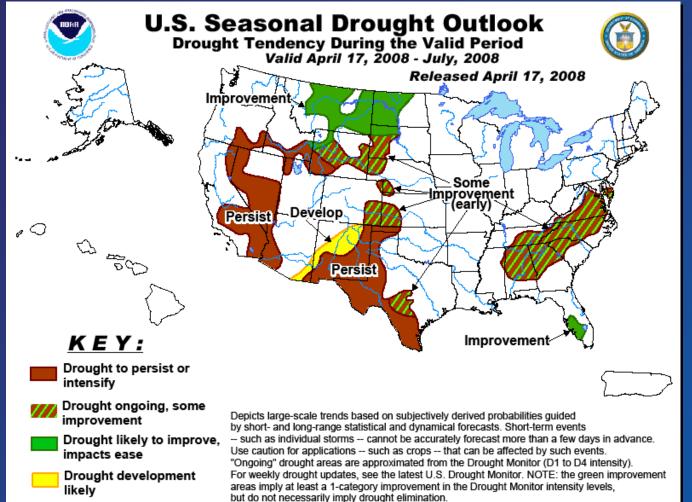
Precipitation



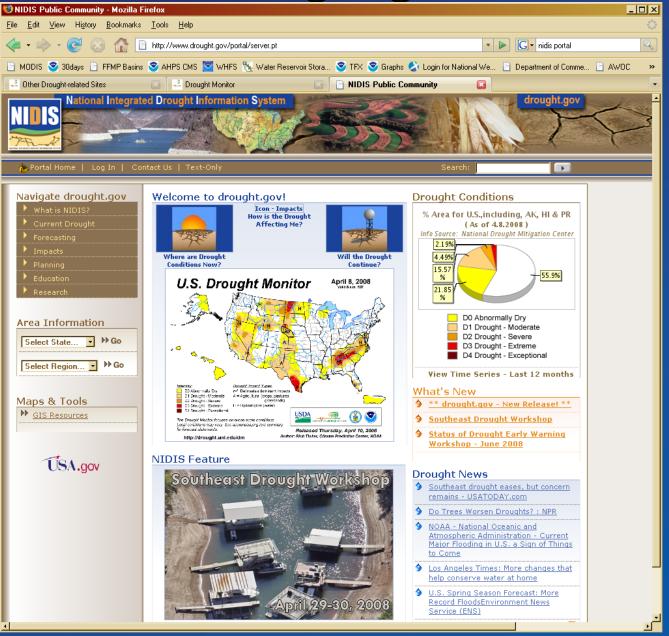
- Better chances precipitation will be below normal over west and central Montana
 - 33% to 40% chance central
 - 40% to 50% chance west
- Remainder of area shows no forecast skill...
 - Equal chances precipitation will be above... below or near normal

Drought Outlook through July

Issued April 17, 2008



 Areas in drought status expected to improve through the spring drought.gov



In Summary...

- •West and southwest Montana have received near normal precipitation through the late fall and winter seasons
- ◆Central and eastern Montana have received below to well below normal precipitation through the late fall and winter seasons
- Seeing some worsening of drought categories east of the Divide
- Near-term forecast is for another storm this weekend
- **◆Forecast through the end of the month shows better chances** for cooler temperatures... no trends for precipitation
- **◆Drought Outlook indicates improvement expected... this based largely on near-term precipitation forecasts.**

weather.gov

weather.gov/billings weather.gov/glasgow weather.gov/missoula weather.gov/greatfalls



Missouri River near Cascade